

Missouri Comprehensive Cancer Control Program

Campaign to Increase Colorectal Cancer Screening and Decrease Smoking in St. Francois County, Missouri

Evaluation Report

Missouri Department of Health and Senior Services



June 2017

Report Information

Title: Campaign to Increase Colorectal Cancer Screening and Decrease Smoking in St. Francois County, Missouri Evaluation Report

Description: The purpose of this report is to describe the process, evaluation and results of the advertising/media campaign conducted in St. Francois County to determine whether or not the community was aware of the campaign messages and how they were impacted by the messages.

Audience: This report is intended for use by the Missouri Cancer Consortium (MCC) and other partners, the general public, as well as, state and local policy makers, researchers, local public health agencies, health care personnel, voluntary organizations and others interested in promoting colorectal cancer screening and smoking cessation.

Acknowledgment: We would like to express our sincere thanks to Dr. Noaman Kayani, Dr. Becca Lander, Victoria Warren, Leslie Murphy, Tiffany Tu'ua, Dr. John Kraemer and Southeast Missouri State University students, St. Francois County Health Department, and all the agencies and staff that participated in the advisory and work groups, planning meetings, data analysis, project implementation, or assisted with the evaluation.

Grant Support: This document was supported by a cooperative agreement between the Centers for Disease Control and Prevention (CDC) and the Missouri Department of Health and Senior Services (DHSS) (#NU58DP003924). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC.

Suggested Citation: Homan SG, Gwanfogbe PN, Hope M, Yun S. Campaign to Increase Colorectal Cancer Screening and Decrease Smoking in St. Francois County, Missouri: Evaluation Report. Jefferson City, MO: Missouri Department of Health and Senior Services, Office of Epidemiology, June 2017.

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Introduction

According to the Missouri Cancer Registry (MCR), 31,157 Missouri residents were diagnosed with invasive cancer in 2012. Lung and bronchus cancer is the leading new cancer diagnosed in Missouri. Tobacco use is responsible for more than 430,000 deaths each year in the United States and smoking causes many chronic diseases including several types of cancer, heart disease, stroke, lung diseases, diabetes and chronic obstructive pulmonary disease. In 2014, colorectal cancer (CRC) was second only to lung/bronchus/trachea as a leading cause of cancer deaths and was the third leading new invasive cancer for both males and females.

To determine areas with the highest burden of colorectal cancer, current smoking and other related risk factors, the Missouri Comprehensive Cancer Control Program (CCCP) collaborated with the Office of Epidemiology (OEE) and the Comprehensive Tobacco Control Program (CTCP) at the Missouri Department of Health and Senior Services (DHSS) to identify a target county. Surveillance data from the Behavioral Risk Factor Surveillance System (BRFSS), Missouri County-level Study (CLS), Missouri Cancer Registry (MCR) and Vital Statistics mortality data were compiled and reviewed to select a target county. In addition, special project data identifying zip codes with high proportions of late-stage colorectal cancer were also reviewed and used to select the target county.

St. Francois County, with a population of 65,359, ranked 26th highest of 115 counties with regards to the prevalence of risk factors (smoking, obesity, physical inactivity and eating less than five servings of fruits and vegetables per day); 29th highest in colorectal cancer incidence rates; 36th highest in colorectal mortality rates; and 26th highest in the proportion of late stage colorectal cancer. The current smoking prevalence among adults in St. Francois County was 26.2% in 2011, compared to 23.1% in Missouri, and ranked 34th highest among the 115 Missouri counties. St. Francois County had existing DHSS partnerships including a smokefree coalition and a healthy initiative focusing on chronic disease prevention, and also had a federally qualified health Center (FQHC). Based on this information, St. Francois County, a “hot spot” for colorectal cancer and smoking, was selected.

The CCCP collaborated with state and local partners (OEE, CTCP, Office of Public Information, Center for Local Public Health Services, American Cancer Society, St. Francois County Health Center and the Missouri Council for Activity and Nutrition) to coordinate a localized and multi-faceted evidence-based advertising/media campaign, combined with relevant policy, system and environmental (PSE) strategies, from late March to mid-June, 2016 in St. Francois County. The purpose of the multi-component campaign intervention was to increase CRC screening and promote smoking cessation, including encouraging calls to the Missouri tobacco Quitline and is described in the methodology. The purpose of this report is to describe the process and the results of the campaign evaluation convenience survey.

Methodology

Beginning in September 2015, DHSS staff began reviewing data and forming a strategy for the pilot project. Partners began collaborating in November 2015 by conference call and email to create the plan, compile materials and review media materials. Surveillance data were compiled and reviewed to select a target county.

Local campaign strategies included:

- Direct Mail: Two mailings to health care providers in the county - a letter with information about the campaign and inserts with Quitline information, local Freedom From Smoking® information and CRC screening information, and a mailing with CRC and Quitline posters.
- Radio advertisements: Four radio ads ran in the county addressing tobacco use, the Quitline and CRC screening.
- Newspaper advertisements: Two color ads ran weekly in two local newspapers addressing CRC screening and smoking.
- Online video: One YouTube video was available to smokers in St. Francois County addressing the link between smoking and CRC that highlighted the Quitline.
- Flyers and factsheets: Flyers, factsheets and postcards were distributed by the county health center with information about CRC screening, the Quitline and Freedom from Smoking® classes.
- Free media: The county health center distributed two press releases in March and April regarding CRC screening, worked with a local newspaper to run an article on CRC screening, and distributed relevant social media messages on Facebook and Twitter.

The project concluded with a convenience survey conducted in the county by Southeast Missouri State University, Center for Environmental Analysis.

The OOE staff, in collaboration with the CCCP staff, developed an evaluation survey to determine whether or not the people residing in the target county were aware of the campaign messages and how they were impacted by the campaign (Appendix 1). The survey was designed to obtain the content information first, then the demographic information, in case the respondent chose not to answer all of the demographic information. The Southeast Missouri State University, Center for Environmental Analysis professor and students implemented convenience sampling with individuals 18 years and older in St. Francois County. Surveys were collected on June 5, 8, 10, and 11 at four locations in the county: Country Mart at 125 W. Karsh Blvd. in Farmington, 301 TJ Stewart Dr. in Park Hills, and 50 Berry Rd. in Bonne Terre; and at the Senior Center in Park Hills. Small incentives from the chronic disease programs (e.g., American Cancer Society T-shirts, heart health cookbooks, tobacco Quitline grocery pads, jar openers, etc.) were given to individuals completing the survey. The completed surveys were mailed to the CCCP and staff completed the data entry. The analyses were completed by OOE staff using SPSS (IBM Corporation). The DHSS Institutional Review Board found this evaluation to be exempt.

Results:

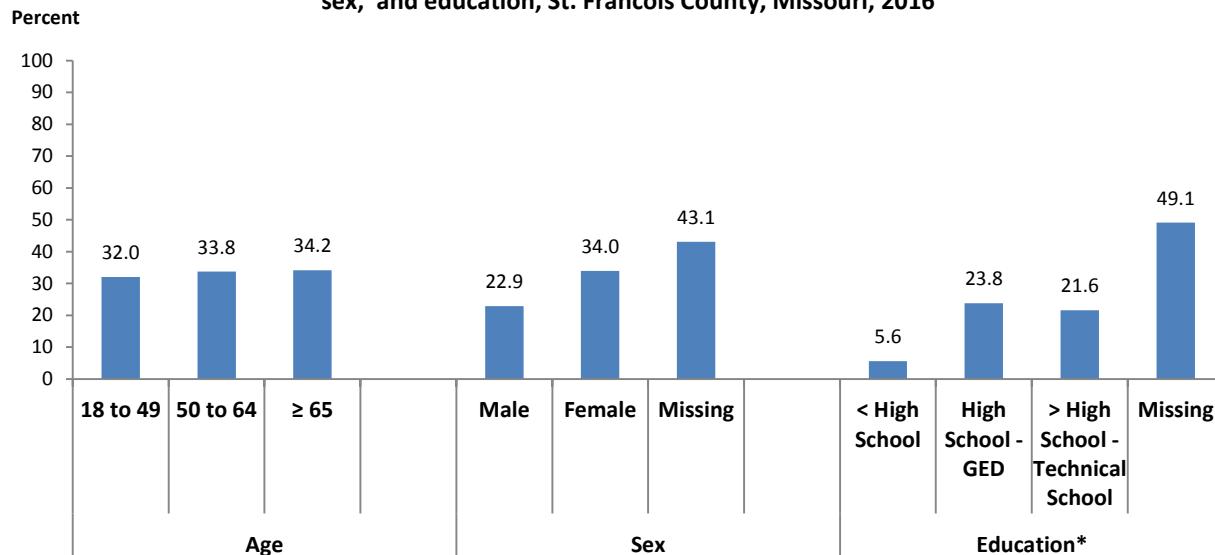
A total of 450 individuals completed the survey between June 5 and June 11, 2016. The majority of the surveys were collected (91.6%) at the three grocery stores, with the grocery stores in Farmington and Park Hills contributing two-thirds (66.0%) of the total sample (Appendix 2).

Demographics

Two-thirds of the respondents who completed the survey were 50 years or age or older (68.0%, n = 306) and 32.0 percent (n = 144) were between 18 and 49 years of age (Figure 1). More than one-half of

the respondents (56.9%, n = 256) indicated their sex, with 22.9 percent (n = 103) male and 34.0 percent (n = 153) females. Slightly more than one-half of the respondents indicated their level of education (50.9%, n = 229). Of those indicating their education attainment, almost one-fourth (23.8%, n = 107) had a high school education or GED, 21.6 percent (n = 97) had some college or technical school education, and 5.6 percent (n = 25) had less than a high school education.

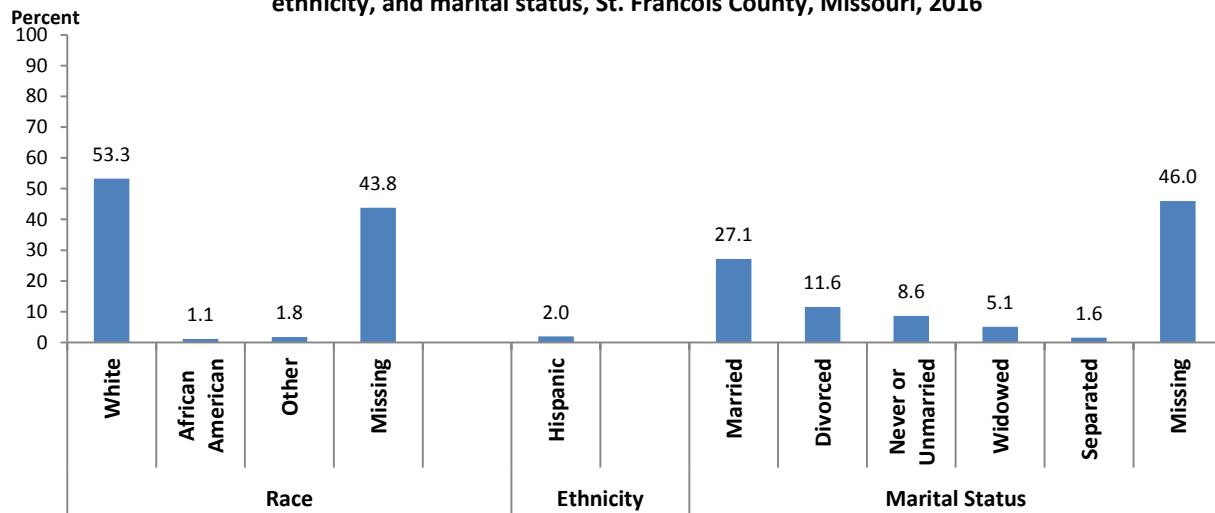
Figure 1. Percentage of respondents completing the campaign evaluation survey by age, sex, and education, St. Francois County, Missouri, 2016



* Percentages may not sum to 100 due to rounding.

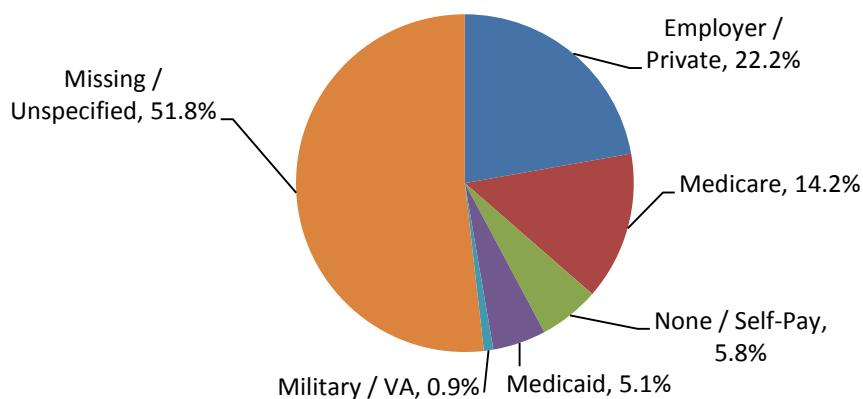
The majority of the respondents were white (53.3%, n = 204) and slightly more than 1.0 percent were African American (Figure 2). Only 2.0 percent (n = 9) of the respondents were Hispanic. A large proportion of respondents (43.8%, n = 197) did not indicate their race. More than one-fourth (27.1%, n = 122) were married; however, almost one-half (46.0%, n = 207) did not indicate their marital status.

Figure 2. Percentage of respondents completing the campaign evaluation survey by race, ethnicity, and marital status, St. Francois County, Missouri, 2016



Almost one-half (48.2%, n = 217) of the respondents indicated the type of health care coverage they had. Approximately one-fifth (22.2%, n = 100) had coverage through an employer or private commercial insurance, followed by Medicare (14.2%, n = 64) and MC+, Medicaid/MO HealthNet, or Medical Assistance (5.1%, n = 23) (Figure 3). Less than 1.0 percent had a type of military or Veteran's Administration (VA) coverage, and 5.8 percent (n = 26) indicated they had no health care coverage (5.8%, n = 26). The remaining one-half (51.8%, n = 233) did not indicate if they had health insurance coverage or did not specify the type.

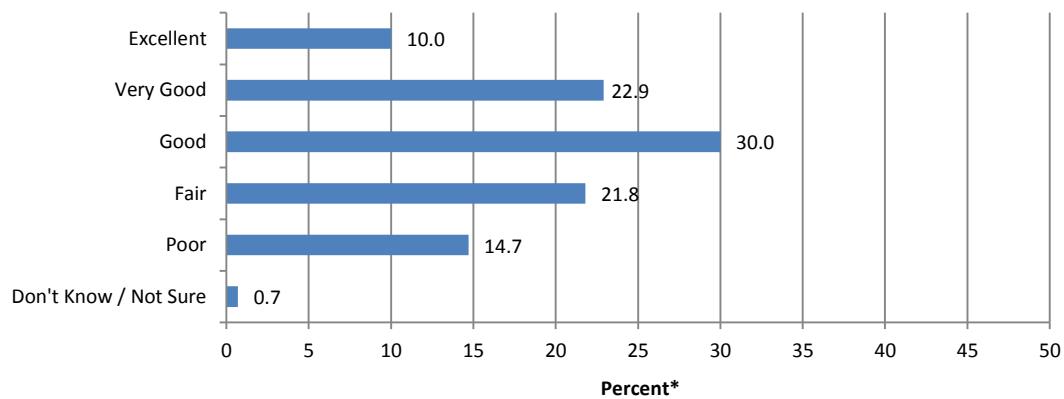
Figure 3. Percentage of respondents completing the campaign evaluation survey by type of health care coverage, St. Francois County, Missouri, 2016



Health Status

Almost two-thirds (62.9%, n = 283) of the respondents rated their health status as good (30.0%, n = 135), very good (22.9%, n = 103), or excellent (10.0%, n = 45) (Figure 4). About one in five respondents (21.8%, n = 98) rated their health status as fair, and 14.7 percent (n = 66) rated it as poor. Only a few respondents (0.7%, n = 3) did not know or were not sure how to rate their health status.

Figure 4. Percentage of respondents by health status rating, St. Francois County, Missouri, 2016



*Percentages may not sum to 100 due to rounding.

Smoking Status, Heard or Saw Messages, and Actions Prompted by Messages

Combining individuals who smoked every day and those who smoked somedays, more than one-third of respondents were current smokers (35.7%, n = 161), and most of the respondents smoked everyday (31.3%, n = 141) (Figure 5). Among the respondents who reported they did not smoke at all at the time of the survey (63.8%, n = 287), 15.7 percent (n = 45) reported quitting prior to March 2016, 51.2 percent (n = 147) reported never smoking, and the remainder did not indicate their former smoking status (not shown). Of the total respondents, 3 out of 4 (75.1%) heard or saw information about the importance of quitting smoking during the three months prior to the survey (Figure 5). Less than 10% of respondents were unsure if they heard or saw the information.

Figure 5. Percentage of respondents by smoking status and heard or saw information on quitting, St. Francois County, Missouri, 2016 (N = 450)

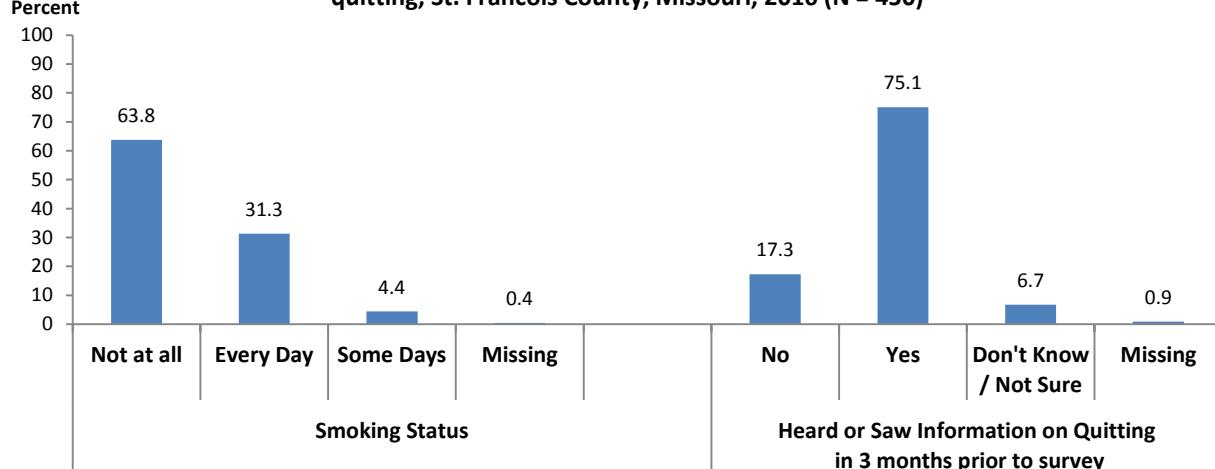
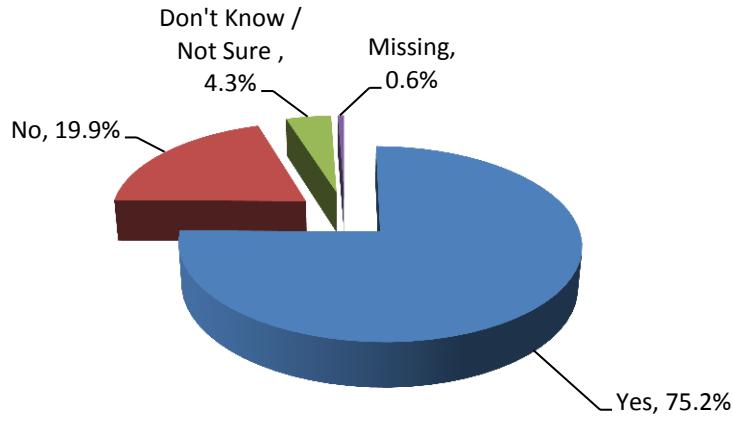


Figure 6. Percentage of current smokers who heard or saw information about the importance of quitting during the past 3 months, St. Francois County, Missouri 2016



Of the current smokers (n = 161), the majority (75.2%, n = 121) heard or saw information about the importance of quitting smoking during the three months prior to the survey (Figure 6).

Among the current smokers who heard or saw information on the importance of quitting smoking (n = 121), the majority cited the source as television (69.4%, n = 84) followed by a health care provider (44.6%, n = 54), radio (38.0%, n = 46), Facebook (17.4%, n = 21), and the newspaper (12.4%, n = 15) (Table 1). Each other source had less than 10 percent of respondents citing that source.

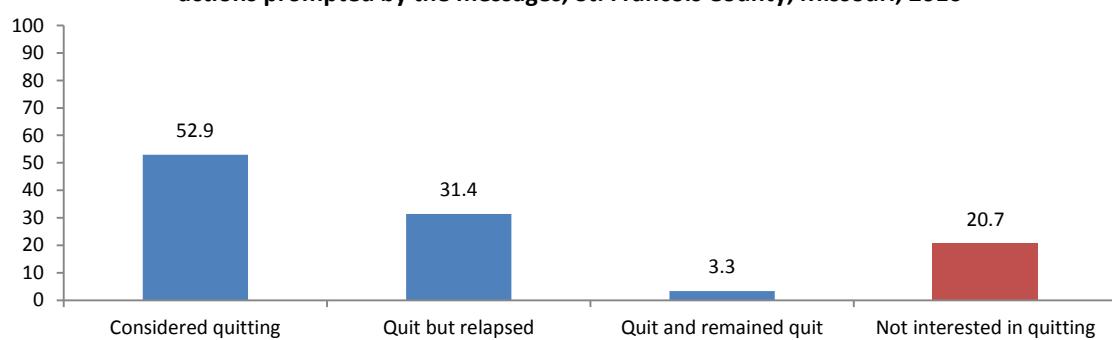
Table 1. Number and percentage of current smokers by source of the information about the importance of quitting smoking, St. Francois County, Missouri, 2016

Source of information	Number*	Percent*
Television	84	69.4
Health care provider	54	44.6
Radio	46	38.0
Facebook	21	17.4
Newspaper	15	12.4
Online video	8	6.6
Flyer/post card	7	5.8
Local Public Health Agency	6	5.0
Twitter	2	1.7
Other sources indicated		
Family	1	0.8
School	1	0.8
Poster	1	0.8

* Number exceeds 121 and percentages do not sum to 100 due to respondents citing multiple sources for the information.

Of the current smokers who heard or saw information on the importance of quitting smoking (n = 121), more than one-half (52.9%) were prompted to consider quitting, 31.4 percent quit but relapsed, and 3.3 percent quit and remained quit (Figure 7). One in five of the current smokers who heard or saw the messages were not interested in quitting (20.7 percent), and the largest proportions of these individuals were 18 to 49 years of age (52.0%), perceived their health to be good or better (68.0%), were male (32%), had a high school education or GED (28.0%), and had employer-based insurance coverage (20.0%).

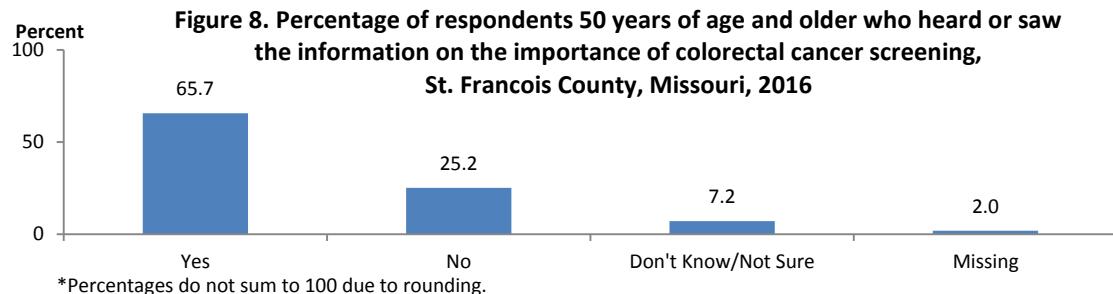
Figure 7. Percentage of current smokers who heard or saw the messages by actions prompted by the messages, St. Francois County, Missouri, 2016



*Percentages do not sum to 100 due to respondents selecting multiple options.

Colorectal Cancer Screening

Two-thirds of the respondents 50 years of age or older (65.7%, n = 201), heard or saw information about the importance of colorectal cancer screening in the previous three months prior to the survey (Figure 8). Approximately one-fourth of respondents in this age group (25.2%, n = 77) did not hear or see the information.



Of the 65.7 percent (n = 201) of respondents who were age 50 or older and heard or saw the information about the importance of colorectal cancer screening in the past three months, a majority cited the source of the information as television (61.2%), followed by health care provider (51.2%), and radio (20.9%) (Table 2). Less than 10 percent of respondents heard or saw the information from each of the remaining sources.

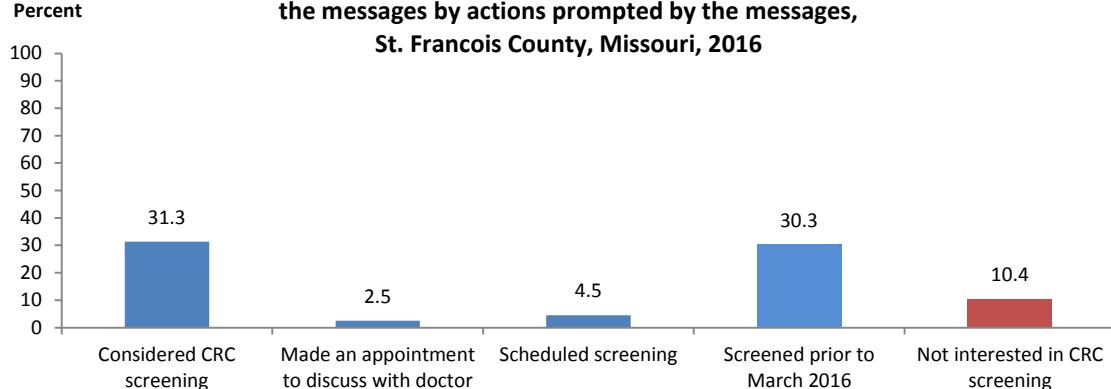
Table 2. Number and percentage of respondents 50 years of age or older by source of information on the importance of colorectal cancer screening, St. Francois County, Missouri, 2016

Sources of information	Number*	Percent*
Television	123	61.2
Health care provider	103	51.2
Radio	42	20.9
Newspaper	17	8.5
Facebook	8	4.0
Local public health agency	7	3.5
Flyer/postcard	6	3.0
Twitter	0	0.0
Online Video	4	2.0
Have not or not sure	2	1.0
Other sources indicated		
Work	2	1.0
Family	1	0.5
Poster	1	0.5

* Number exceeds 201 and percentages do not sum to 100 due to respondents citing multiple sources for the information.

Among the 201 respondents who were 50 years of age or older and heard or saw the information on the importance of colorectal cancer screening, the information prompted respondents to: consider having CRC screening (31.3%), make an appointment to discuss with a doctor (2.5%), and schedule a screening test (4.5%). About one-third of respondents indicated they had a CRC screening prior to March 2016 (30.3%), and the majority of these respondents (95.1%) responded that this screening was a colonoscopy (Figure 9). A small proportion (10.4%) was not interested in screening for colorectal cancer.

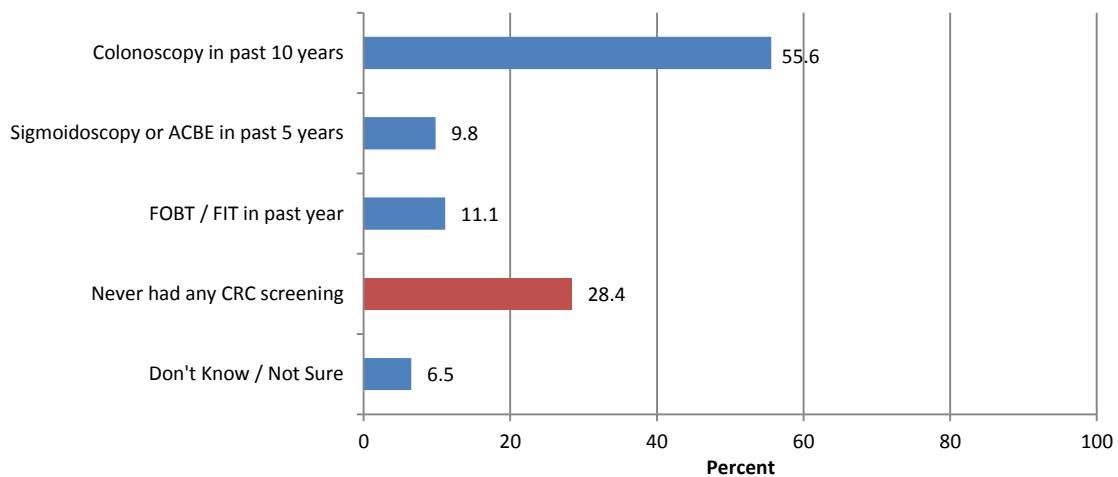
Figure 9. Percentage of respondents 50 years of age or older who heard or saw the messages by actions prompted by the messages, St. Francois County, Missouri, 2016



*percentages do not sum to 100 due to respondents selecting multiple or no options.

Among the respondents 50 years of age or older (n = 306), more than one-half (55.6%) had a colonoscopy in the past 10 years (Figure 10) and others, to a much lesser extent, had sigmoidoscopy or air contrast barium enema (ACBE) in the past 5 years, or fecal occult blood test (FOBT) or fecal immunochemical test in the past year. Approximately one in four respondents (28.4%) had never had any of the CRC screening tests, and only 6.5 percent did not know or were not sure whether they had any colorectal screening tests.

Figure 10. Percentage of respondents aged 50 or older by colorectal cancer screening status, St. Francois County, Missouri, 2016

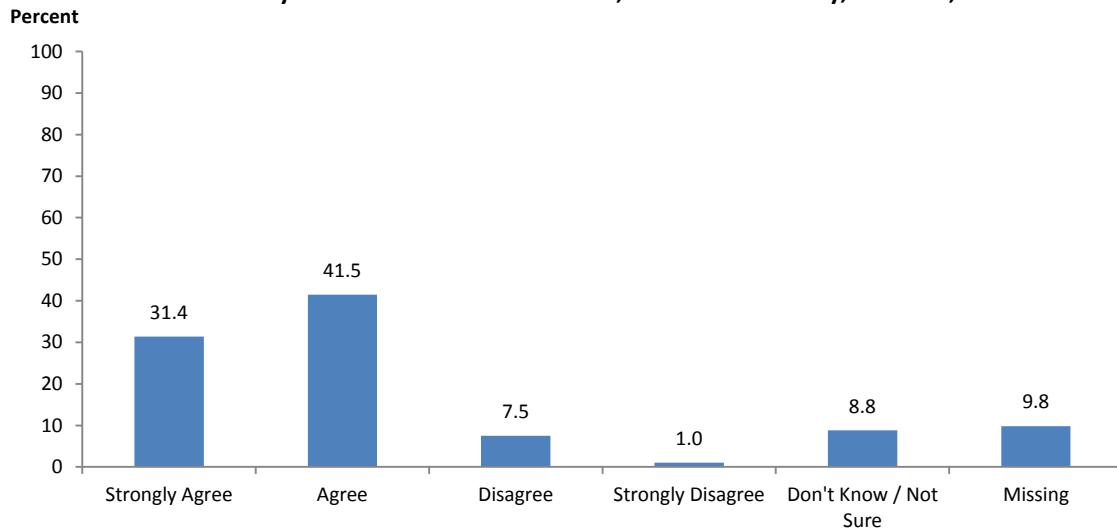


ACBE - air contrast barium enema, FOBT - fecal occult blood test; FIT - fecal immunochemical test.

*Percentages do not sum to 100 due to respondents selecting multiple or no options.

When asked this statement “Having a colorectal cancer screening helped or will help me not worry as much about colon cancer.” A majority of the respondents 50 years of age or older “agreed” or “strongly agreed” with the statement (72.9%, n = 223) (Figure 11). Only 8.5 percent (n = 26) “disagreed” or “strongly disagreed” with the statement.

Figure 11. Percentage of respondents 50 years of age or older by agreement with the statement that "having a colorectal cancer screening helped or would help me not worry as much about colon cancer", St. Francois County, Missouri, 2016



Discussion

Overall, a majority of respondents to this evaluation survey considered their health to be good, very good, or excellent. However, a greater proportion of individuals rated their health as poor or fair (36.5%, 95% confidence interval [CI] 32.1% - 41.0%) compared to the 2011 Missouri County Level Study data for St. Francois County (29.3%, 95% CI 23.5% - 35.2%).

Of the 450 respondents who completed the survey, more than one-third were current smokers (i.e., smoked every day and some days, 35.7%, 95% CI 31.5% - 40.3%). Although not statistically significant, this evaluation shows a higher prevalence of current smoking in this county compared to the 2011 Missouri County Level Study data (26.2, 95% CI 20.4% - 32.1%).¹ Among the respondents reporting current smoking, the majority heard or saw information about the importance of quitting smoking in the three months prior to the survey (75.2%), and slightly more than one-half considered quitting (52.9%), but only a small proportion were able to quit and remain quit (3.3%). However, this finding that some of the respondents were able to quit following this campaign, is consistent with the findings of the Community Services Task Force that recently found a decrease of 5.0 percentage points (range -5.2 to -1.9 percentage points) in the tobacco use prevalence among adults following a mass-reach health communication intervention, based on four studies.² The sources of the information cited most frequently were television, health care provider, radio, Facebook, and newspaper. This is also consistent with the Task Force finding that the evidence was considered strong that television is the primary media channel.

A substantial proportion of current smokers (20.7%) responded that they were not interested in quitting. For these individuals, different messages are most likely needed, such as why they smoke, how it affects their health and their family's health, or encouragement to reduce the number of cigarettes smoked to quit gradually.^{3,4} Inconsistent with the 2001-2010 National Health Interview Survey (NHIS) data, the individuals not interested in quitting in this evaluation tended to be younger (aged 18-49), and have employer-based insurance coverage, but consistent that males and those with a high school education also tended to have a lower interest in quitting.⁵

Among the 306 respondents who were 50 years of age or older, 2 out of 3 (65.7%) heard or saw information about the importance of colorectal cancer screening in the three months prior to the survey. After receiving the messages, about one-third were considering CRC screening (31.3%) and approximately seven percent either made an appointment to discuss with their doctor or scheduled the screening exam. Slightly less than one-third (30.3%) had completed a CRC screening test prior to March 2016, and only 10.4 percent indicated that they were not interested in having a CRC screening. Of those that had completed a CRC screening exam, the majority had a colonoscopy in the past 10 years. These findings are also consistent with the Community Services Task Force findings that multicomponent interventions are effective in increasing CRC screening, particularly for colonoscopy and FOBT.⁶

Studies have shown that a higher perceived benefit and health care provider recommendation positively influence CRC screening behaviors.^{7,8,9,10,11,12} Consistent with the previous studies, this evaluation found a majority of the respondents aged 50 years or older "agreed" or "strongly agreed" with the belief statement (72.9%), that having a colorectal cancer screening helped or would help them not worry as much about colon cancer. In addition, more than one-half (51.2%) of respondents had received information about the importance of colorectal cancer screening in the past three months from a health care provider, and an even larger proportion heard or saw this information on television (61.2%), although television was not a part of this specific campaign. These components of the multi-component intervention may in part explain the proportion of individuals considering and those taking action toward CRC screening.

Limitations

There are limitations that should be considered when interpreting these results. Convenience or non-probability sampling often leads to selection bias and high sampling error. In this evaluation study, it is possible that there is under- or over-representation of particular groups because the high missing demographic information makes it difficult to compare the convenience sample to the county population. In addition, there were other smoking cessation and CRC screening campaigns running concurrent with this effort, which may have also contributed to the high reach found in the evaluation of this campaign. Nevertheless, this evaluation provides initial primary data regarding the sources of information most likely to reach the population and the impact of a county-wide multicomponent intervention and messaging to prompt consideration of and behaviors toward smoking cessation and colorectal cancer screening.

Conclusion

The purpose of the survey was to determine whether or not individuals in the targeted county were aware of the campaign messages and how they were impacted by the messages. A large proportion of the respondents recalled receiving messages on the importance of smoking cessation and colorectal cancer screening. Television, health care provider and radio were cited as the primary sources of this information, and may be the most useful means of communication to reach this rural population with messages to promote colorectal cancer screening and increase quitting smoking. While the majority of current smokers heard or saw information about the importance of quitting smoking, and some took action, a substantial proportion (20.7%) were not interested in quitting. This indicates that smoking continues to be a health issue in this county, and further efforts are needed. In addition, of the participants 50 years and older who heard or saw information about the importance of colorectal cancer screening, a substantial proportion were prompted to consider colorectal cancer screening, and some took action. However, 10.4 percent were not interested in screening for colorectal cancer, also indicating continued efforts are needed to increase screening.

Recommendation

Use mainly television, health care providers and radio, followed by Facebook and newspaper, to reach this community with campaign messages to promote colorectal cancer screening and increase smoking cessation. The findings from this evaluation should be used to guide future cessation and screening interventions. Incorporating and addressing other factors associated with cessation and screening, such as barriers, knowledge regarding what is included in health care coverage and self-efficacy, may further improve the results of multicomponent interventions such as this.

References

¹ Missouri Department of Health and Senior Services. Health and Preventive Practices Community Data Profiles, Missouri County-Level Study. Jefferson City, MO: Division of Community and Public Health.
<http://health.mo.gov/data/CommunityDataProfiles/index.html>

² Community Preventive Services Task Force. Reducing Tobacco Use and Secondhand Smoke Exposure: Mass-Reach Health Communication Interventions. 2013 <https://www.thecommunityguide.org/sites/default/files/assets/Tobacco-Mass-Reach-Health-Communication.pdf>

³ Canadian Cancer Society. For Smokers Who Don't Want to Quit: One Step at a Time. 2013.
https://www.quitpath.ca/files/QP/files/library/OSAAT_Smokers_who_dont Want_to_quit_2013_EN.pdf

⁴ Fagerstrom KO. Can reduced smoking be a way for smokers not interested in quitting to actually quit? *Respiration* 2005;72(2):216-20.

⁵ Malarcher A, Dube S, Shaw L, Babb S, Kaufmann R. Quitting smoking among adults --- United States, 2001-2010. *MMWR* 2011;60(44):1513-1519. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6044a2.htm>

⁶ Community Preventive Services Task Force. Increasing Cancer Screening: Multicomponent Interventions. 2016 <https://www.thecommunityguide.org/sites/default/files/assets/Cancer-Screening-Multicomponent-Interventions.pdf>

⁷ Brenes GA, Paskett ED. Predictors of stage of adoption for colorectal cancer screening. *Prev Med* 2000;31(4):410-6.

⁸ Menon U, Belue R, Skinner CS, Rothwell E, Champion V. Perceptions of colon cancer screening by stage of screening test adoption. *Cancer Nurs* 2007;30(3):178-185.

⁹ Menon U, Champion VL, Larkin GN, Zollinger TW, Gerde PM, Vernon SW. Beliefs associated with fecal occult blood test and colonoscopy use at a worksite colon cancer screening program. 2003;45(8):891-8.

¹⁰ Homan SG, Steward BR, Armer JM. Public health and cooperative group partnership: a colorectal cancer intervention. *Semin Oncol Nurs* 2014;30(1):61-73.

¹¹ Wang HL, Christy SM, Skinner CS, Champion VL, Springston JK, Perkins SM, Tong Y, Krier C, Gebregziabher N, Rawl SM. Predictors of stage of adoption for colorectal cancer screening among African American primary care patients. *Cancer Nurs* 2014;37(4):241-251.

¹² Homan SG, Yun S, Stewart BR, Armer JM. Breast cancer survivorship care: targeting a colorectal cancer education intervention. *J Pers Med* 2015;5(3):296-310.



Missouri Comprehensive Cancer Control Program
Missouri Department of Health and Senior Services

Campaign to Increase Colorectal Cancer Screening and Decrease Smoking
in St. Francois County, Missouri (March 15 – June 15, 2016)

Introduction:

Recently, the Missouri Department of Health and Senior Services conducted a campaign to promote colorectal (colon and rectal) cancer screening and quitting smoking in St. Francois County. The purpose of this survey is to determine whether or not you heard the campaign messages and what you think about the messages. **If you are 18 years of age or older**, we would like to invite you to complete the survey. It should take about 10 minutes or less. The survey is anonymous and answering each question is strictly voluntary.

Questions:

1. How would you rate your health status? (Check only one)

Excellent Very Good Good Fair Poor Don't know / Not Sure
2. What is your age (years)? 18 to 49 50 to 64 65 or older
3. Do you now smoke cigarettes every day, some days, or not at all?

Every day Some days Not at all
4. Have you heard or seen information about the importance of quitting smoking during the past 3 months?

Yes No Don't know / not sure
5. If "Yes", where did you see or hear it (sources)? (Check all that apply)

Radio Newspaper Online Video Facebook Twitter Flyer / Postcard
 Health care provider Local public health agency Television
 Other, please specify _____ Have not or not sure I have heard or seen messages
6. Have these messages and information prompted you to consider quitting or to quit smoking in the past 3 months?

Considered Quit, but smoking again Quit, not smoking Quit prior to March 2016
 Not interested in quitting Never smoked
 Have not or not sure I have heard or seen messages

If you are 50 years of age or older, please continue. If age 18 to 49, Go to Question 12.

7. Have you heard or seen information about the importance of colorectal cancer screening in the past 3 months?

Yes No Don't know / not sure
8. If "Yes", where did you see or hear it (sources)? (Check all that apply)

Radio Newspaper Online Video Facebook Twitter Flyer / Postcard
 Health care provider Local public health agency Television
 Other, please specify _____
 Have not or not sure I have heard or seen messages

9. Have these messages and information prompted you to consider having a colorectal cancer screening in the past 3 months?

Considered Made an appointment to discuss with doctor Scheduled screening test
 Completed screening Screened prior to March 2016 Not interested in screening

10. If you have had a colorectal cancer screening test at any time, did you have?

(Check all that apply.)

Fecal testing (FOBT/FIT) in the past year
 Sigmoidoscopy or Air Contrast Barium Enema in the past 5 years
 Colonoscopy in the past 10 years
 Never had any of these exams
 Don't know/Not sure

11. Regarding this statement, "Having a colorectal cancer screening helped or will help me not worry as much about colon cancer" do you? (check only one)

Strongly Agree Agree Disagree Strongly Disagree Don't know/Not sure

All participants please answer Questions 12 – 18.

12. What is the ZIP Code where you currently live? _____

13. Are you: Male Female

14. Are you Hispanic, Latino/a, or Spanish origin? Yes No

15. Which one or more of the following would you say is your race? White Black/African American
 American Indian / Alaska Native Asian Pacific Islander Other

16. Are you:

Married Divorced Widowed Separated Never Married Unmarried couple

17. What is the highest grade in school you completed?

Never attended school or only attended kindergarten
 Grades 1 through 11 (Elementary and middle school)
 Grade 12 or GED (High school graduate)
 Some College or technical school / Graduate

18. What type of health care coverage do you use to pay for **MOST** of your medical care?

Employer based
 Medicare
 MC+, Medicaid / MO Healthnet, or Medical Assistance
 Some other source, specify _____
 None

If you have any questions regarding this survey, please contact:

Melissa Hope (573) 522-2848 or Melissa.Hope@health.mo.gov

Thank you for your participation!

Characteristics of respondents completing the campaign to increase colorectal cancer screening and decrease smoking evaluation survey, St. Francois County, Missouri, 2016

Characteristic	Number	Percent*
Overall	450	100
Race		
White	240	53.3
African-American	5	1.1
Other	8	1.8
<i>Missing</i>	197	43.8
Ethnicity		
Hispanic	9	2.0
Marital Status		
Married	122	27.1
Divorced	52	11.6
Never or Unmarried	39	8.6
Widowed	23	5.1
Separated	7	1.6
<i>Missing</i>	207	46.0
Age Group^y		
18-49	144	32.0
50-64	152	33.8
≥ 65	154	34.2
Gender		
Male	103	22.9
Female	153	34.0
<i>Missing</i>	194	43.1
Education		
< High School	25	5.6
High School / GED	107	23.8
> High School / Technical School	97	21.6
<i>Missing</i>	221	49.1
Health Care Coverage		
Employer / Private	100	22.2
Medicare / Essence	64	14.2
None / Self-Pay	26	5.8
Medicaid (MO HealthNet) / MC+	23	5.1
Military / Veteran's Administration	4	0.9
<i>Missing</i>	233	51.8
Geographic Location		
Farmington	155	34.4
Park Hills	142	31.6
Bonne Terre	116	25.8
Senior Center Park Hills	37	8.2

*Percentages may not sum to 100 due to rounding.

^y Years